Remarks

Claim 4 is amended. Claims 1-2, 4 and 20-28 are pending.

Amended claim 4 is supported at page 3, lines 14-17 of the specification.

The Examiner is thanked for the courtesies extended to Applicant's Representative in the telephonic interviews conducted on December 21, 2003 and December 23, 2003, in which issues remaining in the present application were discussed.

The claim set enclosed herewith addresses the issues related to claims 3 and 4.

With respect to claim 28, the Examiner is respectfully requested to consider that expression of a coding region in a heterologous system does not necessarily result in a gene product with the identical properties as that of the native gene product. For instance, Fernandez et al. (J. Biol. Chem., 278:40890 (2003)) report that the properties of AptKv3.3, a teleost potassium channel, differed significantly when expressed in Chinese hamster ovary cells and human embryonic kidney cells (a copy of the abstract of Fernandez et al. is enclosed herewith). Cao et al. (Growth Factors, 3:1 (1990)) disclose that introduction of a human acidic fibroblast growth factor gene to insect cells led to high levels of expression but, in contrast to human cells, human acidic fibroblast growth factor was not actively secreted out of the insect cells (a copy of the abstract of Cao et al. is enclosed herewith). Dreyfus (J. Gen. Microbiol., 135:3097 (1989)) report that the *Legionella pneumophila recA* gene product, when expressed in *E. coli*, did not promote induction of a lambda lysogen (induction of a lambda lysogen is associated with *E. coli* RecA activity) (a copy of the abstract of Dreyfus is enclosed herewith).

The Examiner asserted that claim 22 does not satisfy the written description requirement of 35 U.S.C. § 112, first paragraph. However, the Examiner is requested to consider Examples 9 and 16 in the Written Description Training Materials (a copy of those Examples is enclosed herewith). In Example 9, a claim directed to an isolated nucleic acid that specifically hybridizes under highly stringent conditions to the complement of SEQ ID NO:1 and encodes a protein that binds to a dopamine receptor and stimulates adenylate cyclase activity, was found to satisfy the written description requirement in view of a disclosure of SEQ ID NO:1, nucleic acids which hybridized to the complement thereof under highly stringent conditions, and the function of the encoded protein(s). In Example 16, a claim directed to an isolated antibody capable of binding to antigen X was found to satisfy the written description requirement in view of a disclosure of the

isolation of antigen X, the characterization of the molecular weight of antigen X and a use for the antigen, i.e., to detect HIV infections.

Claim 22 of the present application is directed to an expression vector comprising a promoter operably linked to a nucleic acid segment which encodes a fusion polypeptide comprising at least a portion of a DNA repair polypeptide which binds an antibody specific for SEQ ID NO:2. The present specification discloses the preparation of an expression cassette encoding a fusion polypeptide having a portion of a DNA repair polypeptide which binds an antibody specific for SEQ ID NO:2 (Example 3). SEQ ID NO:2 is disclosed as having a molecular weight of about 95 kDa. Accordingly, claim 22 satisfies the written description requirement of 35 U.S.C. § 112, first paragraph.

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney 612-373-6959 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date December 30, 2003

By _____
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I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

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